



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,208	11/28/2001	Gregory W. Cox	CML00090N(69611)	1240

22242 7590 07/28/2003

FITCH EVEN TABIN AND FLANNERY
120 SOUTH LA SALLE STREET
SUITE 1600
CHICAGO, IL 60603-3406

EXAMINER

PHILPOTT, JUSTIN M

ART UNIT	PAPER NUMBER
----------	--------------

2665

DATE MAILED: 07/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/996,208

Applicant(s)

COX ET AL.

Examiner

Justin M Philpott

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 May 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response

1. In the Response filed May 12, 2003, Applicant has submitted a signed declaration including the citizenship of inventor Smith, submitted a new Figure 1 including corrections with respect to the labels, and argued that claims 1-15 as originally filed should be allowable. Accordingly, the declaration and the drawings are no longer objected to. A response to Applicant's arguments is provided in the following.

Response to Arguments

2. Applicant's arguments filed May 12, 2003 have been fully considered but they are not persuasive.

First, Applicant argues (page 5, last paragraph continuing to page 6; and page 7, last paragraph) that Narten teaches that operations are performed by a human operator and that the Examiner has failed to provide support for the contention that automating the step of identifying whether a router needs a new address prefix would have been obvious to one of ordinary skill in the art at the time of the invention. While the Examiner may agree that Narten may teach steps which are performed by a human operator, the Examiner maintains the position that automating known steps would have been obvious to one of ordinary skill in the art at the time of the invention. The previous office action clearly supports this position by reciting:

“Replacing a method that is performed manually with the same method performed automatically would provide obvious significant benefits, such as significant increased speed, reduced cost, and predictable and accurate performance, which would be obvious to one of ordinary skill in the art. That is, at the time of the invention it would have been obvious to one of ordinary skill in the art to adapt the known method of identifying whether a router needs new address prefixes for active links to be performed

Art Unit: 2665

automatically, in order to provide obvious significant benefits such as significant increased speed, reduced cost, and predictable and accurate performance" (page 3).

Additionally, in response to Applicant's request (page 7, last paragraph) for the Examiner to set forth specific examples which can be relied upon for further explanation of the position that it is obvious to automate known steps, reference can be made to In re Venner, 120 USPQ 192 (CCPA 1958). Furthermore, it is well settled that it is not "invention" to broadly provide a mechanical or automatic means to replace manual activity which has accomplished the same result. In re Rundell, 18 CPA 1290, 48 F.2d 958, 9 USPQ 220.

Second, Applicant argues (page 6, paragraphs 1-3) that Narten does not provide criteria by which one might determine whether a given interface should be an advertising interface. However, the claims do not recite a limitation of providing criteria for determining whether a given interface should be an advertising interface. Thus, in response to Applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., providing criteria for determining whether a given interface should be an advertising interface) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Nevertheless, for the sake of argument, such a limitation is in fact taught by Narten (e.g., see section 6.2.2 "Becoming an Advertising Interface", page 44) wherein Narten teaches means for selecting a given interface to be an advertising interface (via, e.g., AdvSendAdvertisements flag, enabling the interface, or enabling IP forwarding capability) wherein the selection is inherently determined by a human operator/administrator using appropriate judgment or criteria known in the art.

Third, Applicant argues (page 6, paragraph 4 – page 7, paragraph 2) that Narten fails to teach a router determining whether a new address prefix is needed for an identified active communication link because in the previous office action reference was made to section 7.3 which does not make a specific or equivalent reference to the word “prefix”. However, section 7.3 was referenced to indicate procedures for when router reconfigurations are needed, encompassing new address prefixes (e.g., see reference to initiating Neighbor Unreachability Detection in section 6.3.5 Timing out Prefixes and Default Routers, first paragraph). Further reference specific to “prefixes” can be made to, e.g., sections 6.3.4 - 6.3.7. For example, in section 6.3.4, Narten identifies whether the router needs a new address prefix for an identified active communication link by disclosing the step of: “If the prefix is not already present in the Prefix List ..., creat[ing] a new entry for the prefix...”. Thus, Narten clearly teaches the claimed limitation of determining whether a new address prefix is needed for an identified active communication link.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the document by Narten et al. entitled “Neighbor Discovery for IP Version 6 (IPv6)” (Network Working Group, Request for Comments 2461, December 1998).

Regarding claims 1-3, 8 and 11-13, the IPv6 taught by Narten comprises identifying one or more active communication links to provide identified active communication links (“Router

Art Unit: 2665

Advertisement”, see 6.2 Router Specification, pages 40-49), and identifying whether the router needs a new address prefix for the identified active communication links (e.g., see “Neighbor Unreachability Detection” on page 66 and sections 6.3.4 – 6.3.7). While the IPv6 may not specifically provide for *automatic* identification of whether the router needs a new address prefix for the identified active communication link, it is known in the art to adapt an existing method to be automatic. Replacing a method that is performed manually with the same method performed automatically would provide obvious significant benefits, such as significant increased speed, reduced cost, and predictable and accurate performance, which would be obvious to one of ordinary skill in the art. That is, at the time of the invention it would have been obvious to one of ordinary skill in the art to adapt the known method of identifying whether a router needs new address prefixes for active links to be performed automatically, in order to provide obvious significant benefits such as significant increased speed, reduced cost, and predictable and accurate performance.

Regarding claims 4, 7, 14 and 15, the IPv6 further provides a user to determine whether a router needs to advertise a new address prefix for use by link endpoints by soliciting at least one router to advertise (e.g., see section 6.2.2 “Becoming an Advertising Interface”, page 44). For the same reasons discussed above regarding claims 1 and 11, at the time of the invention it would have been obvious to one of ordinary skill in the art to adapt this known step to be performed automatically. That is, at the time of the invention it would have been obvious to one of ordinary skill in the art to adapt the known method of determining whether a router needs to advertise a new address prefix for use by link endpoints by soliciting at least one router to advertise to be

Art Unit: 2665

performed automatically, in order to provide obvious significant benefits such as significant increased speed, reduced cost, and predictable and accurate performance.

Regarding claims 5 and 9, the IPv6 further provides determining when a router has not received a prefix advertisement from another router for the same active communication link (e.g., see “AdvPrefixList”, page 42).

Regarding claim 6, IPv6 further provides determining when a router has not received a prefix advertisement from another router for the same active communication link within a predetermined period of time (e.g., see “AdvReachableTime”, page 41).

Regarding claim 10, IPv6 further provides a user to determine that the router needs to support the identified active communication link (e.g., see “Router Solicitation”, page 17) when no other router has transmitted a prefix advertisement for an active communication link (e.g., see “AdvPrefixList”, page 42).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2665

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin M Philpott whose telephone number is 703.305.7357. The examiner can normally be reached on M-F, 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D Vu can be reached on 703.308.6602. The fax phone numbers for the organization where this application or proceeding is assigned are 703.872.9314 for regular communications and 703.872.9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.305.4750.

Justin M Philpott



July 14, 2003

